

Remarks:

In response to the Official Action mailed July 31, 2006, Applicant respectfully requests reconsideration, reexamination and allowance of claims 1, 4, 6-7, and 9 in view of the above amendments and the following remarks.

The Examiner has first rejected claims 1, 4, 6-7, and 9 under 35 U.S.C. §112, second paragraph, as reciting concentrations in weight percentages without a basis for the weight percentages in the Specification.

Applicant has amended the Specification to clarify that the percentages disclosed in the Specification are based upon the weight of the sealant. No new matter has been introduced by this amendment. Applicant respectfully requests that this basis for rejection now be withdrawn.

Next, the Examiner has rejected claims 1, 4, 6-7, and 9 under 35 U.S.C. §112, second paragraph, as failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Examiner contends that it is unclear from the claims whether “when positioned” refers to the intended use of the sealing element or whether the “sealing element” includes the first and second components.

Applicant has amended independent claim 1 to remove the phrase at issue, namely “wherein the sealant material, when positioned about a first component is overmolded with a material forming a second component, the sealant material, being heat activated, forms a seal between the first and second components.” Applicant respectfully requests that this basis for rejection now be withdrawn.

The Examiner next has rejected claims 1, 4, 7 and 9 under 35 U.S.C. 102(a) or (e) as being anticipated by Blank et al. (U.S. Patent No. 6,319,964). The Examiner contends that Blank et al. teaches heat-expandable molded synthetic resin seal and baffle components wherein the molded components are formed from a synthetic resin comprising grafted anhydride polymers.

Applicant has reviewed the relevant prior art and amended its claims as set forth above. Applicant respectfully requests the Examiner reconsider and withdraw the rejection in light of the preceding amendments and following remarks.

The Examiner asserts that Blank et al. discloses a composition for such components

comprising: a grafted anhydride polymer, particularly ethylene polymers, present in the composition on a weight percentage basis of from about 10 to about 60 percent (purportedly reading upon the "second polymer being an ethylene polymer" in an amount of about 20 to about 35 percent by weight); about 1 to about 10 weight percent of a terminal epoxide polymer additive (purportedly reading upon about 2 to about 5 percent by weight of an epoxy resin); about 1 to about 10 weight percent of a blowing agent; about 1 to about 50 weight percent of a filler polymer, preferably ethylene-vinyl acetate (purportedly reading upon ethylene vinyl acetate copolymer in an amount of about 25 to about 40 percent or about 25 to about 30 percent by weight); about 1 to about 15 weight percent of a tackifier, preferably a hydrocarbon resin (purportedly reading upon about 1 percent to about 15 percent or about 10 to about 15 percent by weight of a hydrocarbon resin); about 1 to about 20 weight percent of an inorganic or organic filler, preferably calcium carbonate (purportedly reading upon calcium carbonate inert mineral filler in an amount of about 20 to about 45 percent by weight); and preferably about 0.01-0.1 wt% of a photoinitiator (purportedly reading upon activator in about less than one percent) and about 1-10 weight percent of a reactive resin system.

It is clear from the Blank et al. disclosure that the Blank et al. composition is a heat-expandable synthetic resin. The Blank et al. resin is designed to expand greatly in order to fill a large void, such as the interior cavity of an automobile body.

For example, Applicant notes that Blank et al. reports: "[t]he moldable compositions for preparation of heat-expandable components in accordance with the invention preferably include a quantity of a grafted anhydride polymer, and an amount of a polymer additive containing a terminal epoxide group which reacts with at least a part of the anhydride polymer when the component is heated sufficiently for expanding the composition." (Col. 3, lines 34-40). Preferably, the grafted anhydride polymer in Blank et al. is ethylene-vinyl acetate grafted with maleic anhydride functionality (Col. 3, lines 63-65). Furthermore, the Blank et al. composition requires a "blowing agent which effects expansion of the molded component when the component is heated" (Col. 3, lines 42-45). The preferred blowing agent is azodicarbonamide in a concentration of about 1-10% by weight of the composition.

Far different from the Blank et al. material, the sealant material of the instant invention does

not rely on expansion of the material under heat in order to create a seal. In fact, as the Examiner has noted, the sealant material of the instant material does even not contain a blowing agent. Rather, the sealant material of the instant invention merely softens and adheres to the surrounding first and second components thereby creating a tough, durable and stable seal (Specification, page 5). Thus, Applicant has amended independent claim 1 to specify that the sealant material is "non-expanding."

In light of the present amendment to independent claim 1, Applicant respectfully requests the Examiner reconsider and withdraw the rejection of claim 1 (and dependent claims 4, 7 and 9) under 35 U.S.C. 102(a) or (e) since each and every element of independent claim one is not found in the Blank et al. disclosure.

The Examiner has also rejected claim 6 under 35 U.S.C. 103(a) as obvious over Blank et al. Applicant respectfully traverses this rejection.

"To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP §2143. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. *Id. citing In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

With regard to the final criterion, to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is non-obvious under 35 U.S.C. 103, then any claim depending therefrom is non-obvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); MPEP § 2143.03.

When applying 35 U.S.C. 103, the following tenants of patent law must be adhered to: (A) the claimed invention must be considered as a whole; (B) the references must be considered as a

whole and must suggest the desirability and thus the obviousness of making the combination; (C) the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (D) reasonable expectation of success is the standard with which obviousness is determined. MPEP §2141 *citing Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986).

"The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If, however, the examiner does produce a prima facie case, the burden of coming forward with evidence or arguments shifts to the applicant who may submit additional evidence of non-obviousness, such as comparative test data showing that the claimed invention possesses improved properties not expected by the prior art." MPEP §2141.

The Examiner has not produced a prima facie case of obviousness under 35 U.S.C. 103(a) because Blank et al. does not teach or suggest all of the claim limitations in Applicant's dependent claim 6 in light of Applicants amended independent claim 1, as discussed above (namely, the that the sealant material is non-expanding). Moreover, Applicant questions the Examiner's naked contention that one skilled in the art "would have been motivated to utilize routine experimentation to determine the optimum amount of filler to provide the desired reinforcing or mechanical properties for a particular end use." The Examiner therefore is respectfully requested to reconsider and withdraw the rejection.

Finally, the Examiner has rejected claims 1, 4, 6 and 7 under 35 U.S.C. §103(a) as obvious in light of Knight et al. (U.S. Pat. No. 4,619,848) as evidenced by Blank et al., Douglas (U.S. Pat. No. 4,680,316), Bryant et al. (U.S. Pat. No. 3,872,548), Samuel et al. (U.S. Pat. No. 4,360,120) or Takago et al. (U.S. Pat. No. 4,376,192). The Examiner has taken the position that although Knight et al. does not specifically teach using calcium carbonate in the instantly claimed percentages, it would have been obvious to one of skill in the art to use calcium carbonate in the recited percentages because "calcium carbonate is an obvious species of filler material or inorganic pigment utilized in the sealant art" as evidenced by Blank et al., Douglas, Bryant et al., Samuel et al. or Takago et al.

As discussed above, "[t]o establish a prima facie case of obviousness, three basic criteria

must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP §2143.

While the Examiner has offered evidence of a handful of patents for various sealant compositions in which calcium carbonate sometimes is used as a filler, the Examiner has not satisfied the initial burden of proving a *prima facie* case of obviousness. In particular, Applicant notes that Knight et al. teaches away from using any type of filler in the instantly claimed percentages.


As disclosed in Knight et al.: "The composition generally consists only of organic components but if desired may include non-fusible materials such as titanium dioxide, china clay or other inorganic pigments or fillers. *If non-fusible material is present its total amount is normally below 10% and most usually below 5%, based on the weight of organic components, for instance 0.5 to 3% by weight* [emphasis supplied]" (Col. 2, line 64 – Col. 3, line 2). Applicant's claimed sealant material contains between 20 and 45 weight percent calcium carbonate inert mineral filler material. Such amount is, at a minimum, twice the maximum amount contemplated by Knight et al. and nearly 700% of the "usual" filler amount as described in Knight et al. There is no suggestion or motivation in Knight et al. to either use calcium carbonate as a filler or to increase the weight percentage of the filler to the instantly claimed levels. The Examiner therefore is respectfully requested to reconsider and withdraw the rejection of claims 1, 4, 6 and 7.

Accordingly, Applicant respectfully requests reconsideration, reexamination and allowance of claims 1, 4, 6-7, and 9 in view of the above amendments and remarks. Should the Examiner believe that a telephone interview would expedite prosecution and allowance of the present application, or address any outstanding formal issues, she is respectfully requested to contact the undersigned.

Respectfully submitted,

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Amendment C

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